

FIRST RECORD OF GENERA *NIPHADONYX* DALLA TORRE AND *ISCHNOPUS* FST. AND DESCRIPTION OF TWO NEW SPECIES FROM INDIA (COLEOPTERA : CURCULIONIDAE : HYLOBIINAE)¹

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(With eleven text-figures)

INTRODUCTION

We have collected 35 species of the subfamily Hylobiinae under a 5 year PL-480 Project on Indian Curculionidae. Fourteen of the species collected were new to science. Two of these species, one each under genus *Niphadonyx* Dalla Torre and *Ischnopus* Fst. are being reported in this communication.

Previous work on Indian Hylobiinae consists of accounts of individual species by different workers but the characters of Indian genera have been elaborated and keys for them have been proposed by Marshall (1932) and Aslam (1963).

The monobasic genus *Niphadonyx* Dalla Torre was first erected by Faust (1886) as *Heteronyx*, which being preoccupied was replaced by the present name by Dalla Torre *et al.* (1932). The genus was typed on *N. ferus* Fst. from Pamir. The type-species and a new species have been collected and studied by the authors, marking the first report of this genus from India. The elaborated characterization of genus and description of the new species are recorded below. The information on male and female genitalia of the type species of genus *Niphadonyx* Dalla Torre is recorded and key to the species of the genus is also given.

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Genus *Niphadonyx* Dalla Torre

Head with frons as broad as or broader than base of rostrum ; eyes, lateral, small. Pronotum with basal margin rounded ; prosternum deeply excavated. Elytra truncate at base, without marked shoulders. Mid and hind tibiae broadened subapically, with their fringes sinuate ; tarsal claws appendiculate. Metasternum shorter than diameter of middle coxae. Abdominal sternite 2 shorter than 3 and 4 taken together. Male genitalia with endophallus well developed ; parameres long and leaf-like. Spiculum ventrale laterally produced and medially curved at its free end.

Type Species : *Niphadonyx ferus* (Fst.)

KEY TO SPECIES OF GENUS *Niphadonyx* DALLA TORRE

Small species. Frons without a median fovea. Pronotum closely and deeply punctate. Striae granulate. Aedeagus with apex pointed. *ferus* (Fst.)

Large species. Frons with a median Fovea. Pronotum closely and rugosely punctate. Striae without granules. Aedeagus with apex broad *foveatus* sp. nov.

Niphadonyx ferus (Fst.)

(Figs. 1, 2, 3)

Faust, Horae Soc. Ent. Ross., XX, 1886, p, 172.

Male genitalia : Aedeagus long, about two times as long as broad, broadest at base and

gradually narrowed towards apex, subacuminate apically, strongly sclerotized laterally and apically; phallotreme almost circular, with a pair of lightly sclerotized triangular plates one on either side; aedeagal apodemes very long, longer than aedeagus, each slightly curved outwards near base but swollen and weakly sclerotized at free end; endophallus beset with irregularly distributed short tubercles; phallobase uniformly sclerotized, parameres long, leaf like, free at base, with apical membranous part of each furnished with many short setae; phallobasic apodeme as broad as aedeagal apodemes and about one-third as long as the former, with their apical ends rounded.

Female genitalia: Coxites long, subtriangular, weakly sclerotized; styli longer than broad, almost parallel-sided, more sclerotized than coxites, each furnished with a few short and long setae at apex. Spiculum ventrale V-shaped, laterally produced at free end, not uniformly sclerotized. Spermathecal capsule short, slightly curved at middle, uniformly and weakly sclerotized; cornu short with its apex blunt; ramus and collum not distinctly marked.

Specimen loaned from Forest Research Institute, Dehradun; reported to be collected under stones in Lidar Valley, State of Jammu and Kashmir.

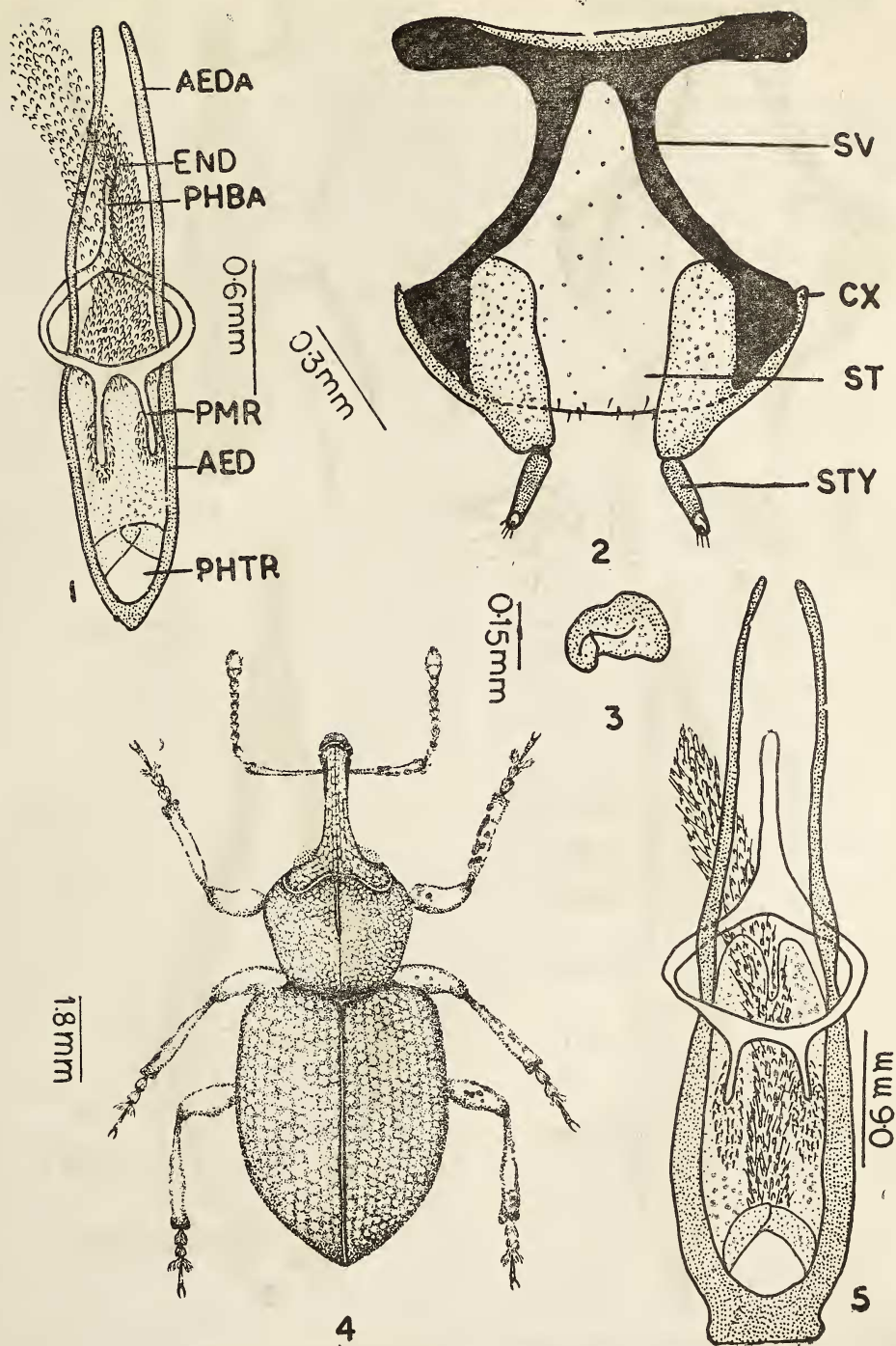
***Niphadonyx foveatus* sp. nov.**

(Figs. 4, 5, 6, 7)

Head piceous, coarsely and closely punctate; frons broader than base of rostrum, with a median shallow fovea; eyes brownish-black, latero-ventral, acuminate below, separated beneath. Rostrum fuliginous, shorter than pronotum, gradually widened towards apex, with a small shallow median indistinct sulcus near antennal insertion; surface of rostrum

coarsely and rugosely punctate, punctures fine and sparse beyond antennal insertions, furnished with very minute pale setae, setae long near apex; scrobes oblique, their apical ends visible dorsally, widely separated beneath. Antennae ferrugineous, long, inserted near apex of rostrum; scape long, slightly longer than funicle, clavate at apex, beset with pale white sparse setae; funicle 7-segmented, beset with long yellow setae, segments 1 and 2 longer than other segments, 3 to 7 transverse, 7 distinct from club; club 2-segmented, pubescent, terminal segment acuminate, with a few sparse thin white setae.

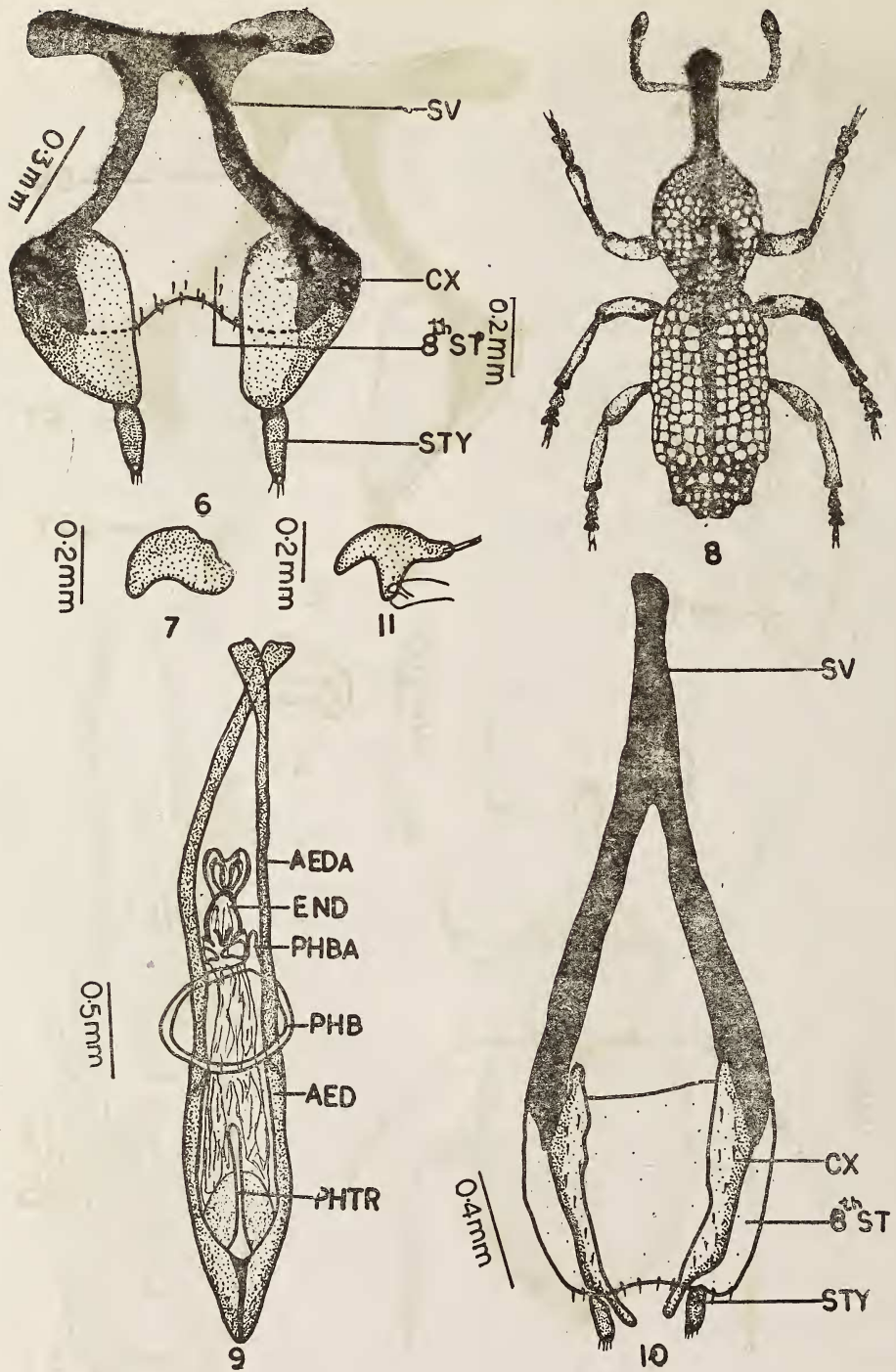
Pronotum piceous, almost as long as broad, narrow at base and broadest at middle, its apical margin bisinuate and basal margin straight; surface of pronotum coarsely and rugosely punctate, marked with a median carina stopping short a little in front of basal margin. Scutellum piceous, small, slightly convex, indistinctly punctate. Elytra piceous, broader at base than base of pronotum, with humeral angles indistinct, their conjoint apices rounded, posterior of each callosity not distinct; surface of each elytron marked with indistinct striae formed of shallow puncture; intervals broader than striae, with a few small scattered pale yellow setae. Legs piceous, sparsely covered with pale white setae; femora edentate ventrally, front femora thicker than middle and hind; tibiae marked with longitudinal ridges, mid and hind tibiae broader subapically and their fringes sinuated; claws appendiculate. Thoracic sternites piceous, punctate, beset with small pale yellow setae; prosternum with its anterior margin deeply sinuate, with a shallow canal present in front of procoxae; metasternum shorter than diameter of middle coxae. Abdominal sternites punctate, beset with small pale yellow setae, intercoxal process between hind coxae broad; sternites 1 and 2 equally long, 2 shorter than 3 and 4 taken together,



Figs. 1. Male genitalia of *Niphadonyx ferus* (Fst.)
 2 & 3. Female genitalia & spermatheca of *Niphadonyx ferus* Fst.
 4. Adult *Niphadonyx foveatus* sp. nov. ♂
 5. Male genitalia of *Niphadonyx foveatus* sp. nov.

Abbreviations :

AED—Aedeagus ; AEDA—Aedeagal apodeme ; CX—Coxite ; END—Endophallus ; PHBA—Phallobasic apodeme ; PHTR—Phallotreme ; PMR—Paramere ; ST—Sternite ; STY—Styli ; SV—Spiculum Ventrale.



Figs. 6 & 7. Female genitalia and spermatheca of *Niphadonyx foveatus* sp. nov.

8. Adult *Ischnopus madrasensis* sp. nov. ♂

9. Male genitalia of *Ischnopus madrasensis* sp. nov.

10 & 11. Female genitalia & spermatheca of *Ischnopus madrasensis* sp. nov.

Abbreviations :

AED—Aedeagus ; AEDA—Aedeagal apodeme ; CX—Coxite ; END—Endophallus ; PHB—Phallobase ; PHBA—Phallobasic apodeme ; PHTR—Phallotreme ; ST—Sternite ; STY—Styli ; SV—Spiculum Ventrals.

Male genitalia : Aedeagus long and tubular, almost two times as long as broad, with apex truncate, strongly sclerotized laterally and apically ; phallosome circular, studded with a pair of triangular weakly sclerotized plates ; aedeagal apodemes slightly longer than aedeagus, each slightly curved outwardly at base, broad at base and narrowed to apex ; endophallus beset with dense short setae and tubercles. Phallobase uniformly sclerotized ; parameres long, leaf-like, separated at base, with apical membranous part of each furnished with many short setae ; phallobasic apodeme two-third the length of aedeagal apodemes, broad at base and narrowed towards apex.

Female genitalia : Coxites long, oval, weakly sclerotized ; styli longer than broad, almost parallel-sided, more sclerotized than coxites, each with a few setae at apex, spiculum ventrale uniformly sclerotized, V-shaped, laterally produced at free end. Spermathecal capsule uniformly sclerotized ; cornu short and rounded at apex ; collum and ramus not well marked.

Measurements :

Body length	.. 12.8-13.2 mm.,
breadth	.. 4.6-5.2 mm.
Head length	.. 0.8 mm.,
breadth	.. 2.0 mm.
Rostrum length	.. 2.2 mm.,
breadth	.. 0.9-1.6 mm.
Prothorax length	.. 3.0 mm.,
breadth	.. 3.1-3.2 mm.
Elytra length	.. 6.8-7.2 mm.,
breadth	.. 4.6-5.2 mm.

Holotype ♂, paratypes 2 ♀♀; India, Jammu and Kashmir, Lidar Valley, Grass (H. R. Pajni) Material in Department of Zoology, Panjab University, Chandigarh.

The monobasic genus *Ischnopus* Fst. is so far represented by a single species from Sri Lanka namely *I. taprobanus* Fst. We have collected another species definitely congeneric with *I. taprobanus* Fst. but differing from it. The new species is thus a new record of genus *Ischnopus* Fst. from India. The revised features of the genus *Ischnopus* Fst., the description of the new species and a key to the two species so far known are recorded below.

Genus *Ischnopus* Fst.

Rostrum with a glabrous epistome. Eyes lateral. Prementum longer and broader than postmentum. Funicle with segment 1 slightly longer than 2, 7 contiguous with club. Prosternum in front of coxae longer than their diameter. Elytra without shoulders. Femora gradually clubbed and unarmed, procoxae subglobular ; tibial premucro small ; tarsi sublinear, third tarsal segment slightly bilobed. Intercoxal process between hind coxae truncate and as broad as hind coxa. Male genitalia without parameres ; endophallus well developed. Female genitalia with coxites very narrow.

Type species *Ischnopus taprobanus* Fst.

KEY TO THE SPECIES OF GENUS *Ischnopus* FST.

Pronotum with a rhomboidal impression ; Prosternum with a pair of tubercles, one near each coxa. Elytron produced in front at the base of interval 4.
.....*taprobanus* Fst.

Pronotum without any impression ; Prosternum without such tubercles. Elytron not produced at the base of interval 4.*madrasensis* sp. nov.

chnopus madrasensis sp. nov.

(Figs. 8, 9, 10, 11)

Head rusty black, its surface smooth, without punctures, finely granular, with a deep furrow along posterior margin of each eye; frons almost as broad as or slightly narrower than base of rostrum, marked with a median depression. Eyes piceous, lateral. Rostrum piceous, shorter than pronotum, slightly broadened near apex; surface of rostrum uneven and coarse, without well defined furrow or carina, covered with rust-coloured pubescence; scrobes almost reaching apex, their anterior ends visible dorsally, separated beneath, their upper margins touching the lower margins of eyes. Antennae rust coloured, long, stout, inserted near apex of rostrum; scape longer than funicle, covered with brown pubescence, clavate at apex; funicle 7-segmented, pubescent and beset with sparse light brown setae, basal two segments longer than broad, segment 2 slightly longer than 1, 3 to 6 transverse, 7 longer than broad and contiguous with club; club small, pubescent, beset with light brown setae, 3-segmented, segment 1 smaller than 2 and 3 taken together, 3 very small and acuminate at apex.

Pronotum piceous, longer than broad, broadest at middle, almost parallel-sided, with a constriction near apex, its apical margin truncate and basal margin almost straight; surface of pronotum uneven and coarse, without a puncture or seta, marked with a distinct median carina and many oblique and transverse ridges. Scutellum concealed. Elytra piceous, longer than broad, their humeral angles indistinctly rounded, with a deep constriction near their jointly rounded apex; surface of each elytron marked with striae formed of broad square punctures; intervals narrower than striae, each furnished with irregular tubercles, with a prominent tubercle on interval 3 near base. Legs piceous, stout, covered with brown pubes-

cence; forecoxae subglobular; femora gradually clavate, without a ventral tooth; tibiae slightly curved at base, inner margin of each with a premucro, each beset with small black projections and with a few brown setae along inner margin; tarsal segments not much spongy, with segment 3 bilobed, claws free. Thoracic sternites piceous, beset with brown pubescence; prosternum with its anterior margin sinuate, much longer in front than diameter of procoxae; metepisterna finely punctate, bare. Abdominal sternites piceous, sternites 1 and 2 irregularly punctured, intercoxal process between hind coxae truncate; sternite 1 and 2 almost equal, 2 longer than 3 and 4 taken together.

Male genitalia: Aedeagus long, tubular, broad at middle and gradually narrowed towards apex, strongly sclerotized laterally; phallotreme long, narrowly triangular; endophallus armed with many chitinized plates forming an irregular structure near apex. Phallobase uniformly sclerotized; parameres absent; phallobasic apodeme very short.

Female genitalia: Coxites very long, much longer than broad, each with free end notched and beset with sparse setae; styli slightly longer than broad, strongly sclerotized, each with a few long setae. Spiculum ventrale Y-shaped, its median arm short, lateral arms narrow. Spermathecal capsule uniformly and weakly sclerotized; cornu short with rounded apex; collum long; ramus present at middle of capsule; with broad rounded end.

Measurements :

Body length	.. 15.4-18.4 mm.,
breadth	.. 4.2-4.8 mm.
Head length	.. 0.8-1.4 mm.,
breadth	.. 1.8-2.2 mm.
Rostrum length	.. 2.8-3.0 mm.
breadth	.. 1.02 mm.

NEW DESCRIPTIONS

Prothorax length .. 4.2-5.2 mm,
breadth .. 3.6-4.2 mm.
Elytra length .. 7.6-8.8 mm,
breadth .. 4.2-4.8 mm.

Holotype ♂, paratype 1 ♀; India, Tamil Nadu, Madras; on *Cedrela toona* (Sukesh Sood). Material in Department of Zoology, Panjab University, Chandigarh.

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